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John P. Norton.

MEMORIALS

OF

JOHN PITKIN NORTON,

LATE PROFESSOR OF

ANALYTICAL AND AGRICULTURAL CHEMISTRY,

IN

YALE COLLEGE, NEW HAVEN, CONN.

Published for Private Distribution.

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This collection of memorials has been published to meet the requests, from many friends of the deceased, for copies of Doct. PORTER's Sermon, and other interesting notices called forth by his death.

Several gratifying notices from various periodicals, are not included, being similar, in tenor and general character, to those selected.

Memorials, &c.

From the New Haven Journal and Courier.

PROF. JOHN PITKIN NORTON.*

This much lamented man died of a rapid decline, Sunday, Sept. 5th, at 1½ o'clock P. M., at the house of his father, John T. Norton, Esq., in Farmington. Prof. Norton was appointed, a few years since, by the corporation of Yale College, to a new professorship, that of Chemistry applied to agriculture and the phenomena of vegetable and animal life.

At two different periods, he passed nearly three years in Europe, under eminent professors, and was diligently engaged in preparing himself for the duties of his appointment.

Returning in 1847, he began his courses of both theoretical and experimental instruction. A respectable class of diligent and interested pupils was soon gathered around him, and has been continued and increased in all the successive years.

* From the pen of Prof. SILLIMAN, Sen.

Prof. Norton has been also much before the public, both as a lecturer and an author, on the subjects which he had cultivated, and so high was the estimation in which he was held on account both of his talents and attainments, that his efforts were sought for in a distinguished city* of a neighboring state. In the desire to meet that demand, and at the same time to fulfill his duties in New Haven, he performed winter journeys twice weekly, week by week, during the late severe season, giving a lecture daily until his health failed in the spring.

A southern voyage and a residence in Florida, in March and April, gave his friends strong hopes that his health would be restored, and he commenced his journey homeward with fair prospects; but at Washington the measles arrested him, and his health, although at times improved, has fluctuated from that time, and for some weeks the hopes of his friends had been almost extinguished. His decline, towards the last, was very rapid, but his Christian hope sustained and cheered him in his closing hours, as it had been his solace and guide in health.

His character was every way most estimable and lovely, his manners mild and refined, and his conversation animated and interesting. He was eminently

* Albany, his native city.

happy in his social and domestic relations, and was surrounded by every thing that could make life interesting and valuable. By a mysterious providence he was cut off at the age of 30, ere youth was gone, and in the hour of decided success in his profession.

He had already made a strong and favorable impression on the public mind; he had gained the confidence of ALL, and promised a long career of usefulness.

Yale College, in the short period of five days, has been deprived of two of its brightest ornaments — one in the full maturity of years, learning, and honorable fame — the other, in the bright morning of hope. The excellent Gov. Treadwell and the late reverend senator Timothy Pitkin, were lineal ancestors of Prof. Norton.

His funeral was attended on Tuesday afternoon, from his late residence in Temple avenue.

NEW HAVEN, Sept. 8, 1852.

A

SERMON

OCCASIONED BY THE

DEATH OF JOHN PITKIN NORTON,

Professor of Analytical and Agricultural Chemistry in Yale College.

PREACHED IN FARMINGTON, CONN., SEPTEMBER, 1853,

BY REV. NOAH PORTER, D. D.

SERMON.

——"*and by it he being dead yet speaketh.*"—HEB. xi, 4.

This is said of righteous Abel. Though cut off by murderous hands, he yet lived and spoke, in the faith, the remembrance of which remained. By faith, while he lived, he obtained witness that he was righteous, God testifying of his gifts; and by it, being dead, he spoke to survivors, who remembered him; and through the Scriptures he speaks to us, also, and to all men, wherever the record comes, testifying to the excellence of his faith in the sight of God, its overcoming power as a principle of obedience, and its efficacy to justify and save the soul.

In the same manner, other good men, by their remembered or recorded examples speak, when their lips are silent in death. The long list of worthies whose works of faith are recorded for our imitation in the Old Testament, are spoken of by the apostle Paul as a great cloud of witnesses compassing us about. They speak to us through the Scriptures, testifying to the faithfulness of God, and exhorting us, believing in his word, to lay

aside every weight, and run with patience the race set before us. So, also, our personal acquaintances who have died in the faith, and whose virtues are embalmed in our memories, though dead, yet speak, exhorting us to follow their example. Though gone from us, never to return, they live, and seem to be present with us in their accustomed scenes. They seem to speak to us in those scenes, renewing and confirming the lessons of wisdom, which they gave us, in word or deed, when they were here, and to do this with new impressiveness, in consideration of their end.

We ought then to heed their voice; to call up the remembrance of their lives, and consider what there may be, by which they, being dead, yet speak. To aid you in this, I have ocasionally sketched before you certain characteristics of some of our deceased friends, as I have had the time and opportunity. I have done it, not to eulogise the dead, but to benefit the living; and with this in view I would now remind you of some of the more striking traits of character in our lately deceased friend, Prof. Norton. He was yet in his youth — the character of his childhood and youth is fresh in the remembrance of many of us — he was loved by all of us who knew him, and his death is greatly and very extensively lamented; and I wish to take advantage of these circumstances of the event which we so deeply

deplored, to commend his virtues to your regard, and, particularly, to the attention and imitation of the young men and lads who are coming up among us after him. We can hardly realize that we are to meet him here no more. It requires no stretch of the fancy, to imagine his beaming countenance in his accustomed place in the assembly, and his melodious voice joining in our songs of praise. And though he is not here, and will no more be, yet his footsteps are here, and it may be pleasant and profitable for us to gather up those remembrances of him by which he, being dead, yet speaketh.

1. His filial reverence. I mention this first, because of all the amiable and hopeful virtues of youth this is first developed, and contains the germ of every other. "Honor thy father and thy mother (which is the first commandment with promise), that it may be well with thee, and that thou mayest live long on the earth." How eminently both the precept and the promise here commended to us were exemplified in our departed friend, you who new him can tell. Although, indeed, in respect to the number of his years, we mourn his early death, yet, in respect to his amount of usefulness, he lived long upon the earth; and but for his filial reverence, this had not been. Go back to his early childhood, and none of you remember a disrespectful word concerning his father or mother to have passed his lips.

They know not, and I presume that none of you know, an instance, since his childish days, in which he attempted to deceive them. Not only their commands, but their wishes, were sacred in his regard; and this, not only when he was under their eye, but in their absence. Far off, in a foreign land, and in years of maturity, it was enough to withdraw him from any fashionable amusement or youthful gratification, to know or believe that his father, if present, would wish him to abstain. My young friends, I can not too earnestly commend his example, in this respect, to your regard. Such reverence, in a son of his father, is a fore-shadowing of the Christian's reverence of his God.

2. His accustomed cheerfulness. Cheerfulness beamed in his face, thrilled in his voice, and diffused itself from his buoyant mind over the circle of susceptible minds around him. It was not levity; it was not frivolity; and much less was it jovial sensuality. It was good humour, and often, on fitting occasions, it was playfulness. He had a quick sense of pleasure from those things which God made to give pleasure, and he loved to interchange with others the pleasure that he felt. This, no doubt, was founded partly in constitution; but thousands are of the same constitutional temperament, who yet are too selfish or too anxious, to be cheerful. He was also a favored child of Providence; but thou-

sands on whom Providence lavishes its favors, yet, through discontentment or distrust are unhappy. Cheerfulness is not, of course, a positive virtue; but gloominess, amidst the multitude of God's mercies, is a positive sin. Nor can you conceive how much you may add to your own and others happiness, how much you may lighten the burdens of life, and help them to bear theirs, by cultivating the habit of mind which you can never fail to associate with the memory of our departed friend, the disposition to enjoy whatever in your lot is to be innocently enjoyed, and to regard as lightly as you innocently may, the evils that must be endured; the disposition to make the best of the present, and to hope, as far as God permits, for the future.

3. You will remember his flow of kindness. The cheerfulness, of which I have spoken, consisted in no small measure of good nature. No malign affections or envious feelings shadowed his brow, or saddened his heart. Kindness was planted in his nature, and overflowed in his words and deeds. The poor who were around him enjoyed it. The servants who attended him loved him for it. The early companions to whom he rendered his little offices of friendship, attest it. Hard drinkers whom he labored to save from ruin remember it. He sought the happiness of all about him as he had opportunity, and in a pleasant way, in little things as well as great, and in accommodation to their feelings, as well as

their necessities. For this you loved him, and in this I exhort you to be like him. We were not made, each for himself alone. We are mutually dependent, and answerable to our dependence are the sympathies disposing us to mutual kindness. Were these always followed, under the guidance of enlightened reason, and the dictates of our moral nature, how would they increase the amount of human happiness, how would they conform us to the image of Him, whose glory it is to exercise loving kindness and judgment and righteousness in the earth. They are not holiness; but under the light and power of the gospel, through the Spirit, they lead to it, and without them vain are all pretensions to it. "He that loveth not his brother whom he hath seen, how can he love God, whom he hath not seen?"

4. Sincerity, also, is a shining virtue in which he, being dead,yet speaketh. I have already said, that one who best knew him remembers no instance in which, after he was old enough to act from principle, he intentionally deceived him. We all, I presume, may say the same. He made no false pretensions. He never said what he did not mean. He would not equivocate to hide a fault, or compass an end. He was thoroughly honest. He was to be trusted in any concern. And how much is this to be said of any one! Society is founded in confidence, and confidence in sincerity. Did the young men before me know how much their success

in life, to say nothing of their estimation in the sight of God, must depend on their sincerity—their incorruptible integrity—their so conducting themselves in circumstances of trial, that those who know them shall feel that they are implicitly to be trusted, they would be less ambitous than most men are, of what they call the gifts of fortune. Character is the main thing. It was with Joseph. It was with David. It was with Daniel. "Come, ye children," the voice of wisdom cries, "hearken unto me, and I will teach you the fear of the Lord. What man is he that desireth life and loveth many days, that he may see good? Keep thy tongue from evil, and thy lips from speaking guile."

5. His modesty was not less distinguished. You will not mistake modesty for bashfulness, the timidity that would unfit you to act as you feel, and utter what you know. Our lamented friend was remarkably self-possessed, and yet how very far he was from that impudent boldness which can not blush, and from that overweening self-estimation also which thrusts one into positions unsuited to his condition or his years! His powers early began to be developed—some of them, at least, shone eminently for his years—and they shone amidst his youthful modesty as a diamond set in pearls. Some of you remember him, while yet in his minority, addressing us in one of our Lyceum lectures, on the

habits of birds. You can not have forgotten what careful observation, what comprehensive knowledge, what lively fancy, what amiable feeling, and what powers of description, the lecture discovered, and how much it excited our admiration; and none the less because it was read with down-cast eyes and a trembling hand. The grace which thus adorned his earliest youth was not tarnished in his subsequent life. As years advanced, he could not be insensible that his condition was above the common rank; but he affected no superiority on that account. Returning from abroad, where he had been conversant with people of rank, and received from them flattering attentions, he was, no less than before, condescending to men of low estate. In his professional course, rising at once into eminence — known, applauded and sought for almost throughout the country — he yet retained his simplicity of character and manners to the last. I need not dwell on these things. I mention them, only to remind you of what you must have observed, and persuade you to copy what you must have admired.

6. Nor was he less remarkable for his choice of worthy objects of pursuit. From his early years, he had no relish for low gratifications. It required no pains to keep him from the smoking, chewing, drinking habits into which so many lads eagerly run; nor from the vulgar profaneness which they are apt to indulge — nor

from the places of idle resort which many of them so unhappily frequent; he sought higher enjoyments, a Christian home, useful books, and good society. He had an early thirst for knowledge; he read easily, rapidly, with discrimination and reflection, and so remembered what he read. He studied the book of nature, admiring it as the book of God, carefully observing the forms and habits of beasts and birds and fishes and insects. He treasured up his observations, and added to his stores from books. It was his passion for natural history, that seems to have led him to the choice of a farmer's life, and to the studies that would best qualify him to pursue it. His aim was not to be merely a farmer, but to carry into the business of a farm, and the place in society naturally connected with it, the varied and comprehensive knowledge that would make both these pleasant, improving and useful. For this purpose, he devoted his winters to study, while his summers — some of them, at least — were spent in the labors of a farm. Having made a commendable proficiency in common learning at home, he availed himself of some of the best advantages abroad, in the study of the German and French languages, of Chemistry and Natural and Moral philosophy, of Astronomy, Law and Music, and this, while he thought only of being a practical farmer; and with this prospect, he spent his nineteenth summer in the

independent management and personal culture of a part of his father's farm. I mention these things, not because it is to be expected, or desired, that the young men here present should pursue exactly this course, but to shew them the noble aim of one who was only a few steps before them in the journey of life, and while he thought of the same occupation with theirs, and to stimulate them by his example — though they may not have the same advantages — to make the best use of such as they have. The result in his case, you know. His acquisitions in this country encouraged him to seek higher and rarer acquisitions abroad; and in consequence of these, in his twenty-fifth year, he led the way in this country in one of the most interesting and useful applications of science to practical purposes which the age affords. Providence may not have the same honor in store for you all, but its gifts are not exhausted. Worthy objects are not few, not far off. Seek, and you shall find. It was not by a single, happy choice alone that he whose example now calls you to this, was what he became. The useful and the good determined his general aims. I may mention, as an instance, that when he began to be extensively known, and tempting offers were made him to a more lucrative application of his talents and acquirements than he had proposed, he adhered to his original purpose, as being the more improving and useful. So, also, when he was

not dependent on his earnings for support, he chose to eat his own bread; and when a friend proposed to make him an honorary member of one of our benevolent societies, he thought it more honorable to be a member —as he hoped soon to become — by his personal contribution.

7. His choice of worthy objects led him to untiring industry in prosecuting them. There is nothing great without labor. Those who suppose, if any such there are, that Professor Norton attained his eminence adventitiously, know not his years of study nor his intense application; his nights, as well as days, devoted to study; and, in connection with his regular studies, the multitude of letters that he wrote, the daily journal which for twelve or fourteen years he kept, and the stated contributions to periodicals that he made; and after his entrance on his profession, together with all these, his courses of lectures, his private instructions, his public addresses, and his printed works. He had his recreations; he enjoyed them. A favorite one we knew; but he adopted and continued it, merely as a recreation, certainly, in his latter years, and had he indulged himself in it more freely, might not his invaluable life have been prolonged? In comparison of his industry with our own, may not the greater part of us find ourselves reproved? How much was accomplished by him in the few fleeting years allotted him! He seems, indeed, to

have been quite clear, not only of the absolute indolence but the sluggish action and dreamy thoughtfulness, in which so much of life is ordinarily wasted. Earnest in purpose, strong in conception, exact in discrimination, and careful and settled in his conclusions, he acquired rapidly, he was fully possessed of what he knew, he wrote freely and much, and moved on his ardent course, steadily, safely, joyfully. He lived, while he lived.

8. Exceedingly to be admired also was his moral courage. It was indeed no remarkable proof of this, that in his boyhood he adopted the temperance pledge; nor that while he was in this country he adhered to it; but to adhere to it in foreign countries, and in circles of fashion and distinction, where it is scarcely known, or known only to be lightly regarded, was a trial of firmness which it is difficult for the greater part of us duly to estimate. It is common for men pledged to temperance in this country, on going abroad, to remove their names from the pledge. This our youthful friend would not consent to do. It would seem like dishonoring his early education. He was not unaware of the trial, but he made up his mind to meet it, and he fully sustained the resolution. At agricultural gatherings and public dinners, with the farmers of England and Scotland around the table — introduced to them by his honored teacher, as a young American student and farmer, and called on to join them in the customary glass — he stood firm in his dissent,

and yet so quietly and modestly firm as to shew that he refused, not because he lightly esteemed them, but because he could not be faithless to himself or the cause to which he was pledged. In private circles as well as on public occasions, and at the tables of the titled and the great as well as at his proper home, the habit of his life in this respect was too sacred to be broken; and though wondered at, and sometimes remonstrated with for his singularity, his purpose was not changed. He would not obtrude his opinions on others, nor censure them for habits which he could not approve; and much less would he take upon himself the office of a reprover of those whose age and position in society demanded his deference; but neither would he forego his privilege or deny his accountableness as a servant of God. The same integrity marked his observation of the sabbath. Whether at home or on a journey, he remembered the day of sacred rest. In his journeys, he chose to stay behind with strangers in a strange land, while his company passed on, rather than enjoy their society in violation of his own convictions; and when others around him freely gave and received visits of complaisance, on the sabbath, as on other days, he could by no means sacrifice his sense of duty to customs of civility. Such firmness, however it may temporarily displease, it is impossible to despise. There is, indeed, a self-willed

pertinacity which assumes its name, and is as unlovely as it is troublesome; but to be firm on any point because so is the will of God, and to unite that firmness with "the meekness of wisdom," as did the Apostles, when forbidden to preach in the name of Jesus, is the highest victory which man can achieve. And this brings me to remark:

9. That it was chiefly the piety of this beloved young man by which he, being dead, yet speaketh. This was his crowning virtue, and gave to his other virtues their highest excellence, the character of holiness. This raised his filial reverence into godly fear; his constitutional cheerfulness into spiritual joy; his natural kindness into Christian benevolence; his honesty into godly sincerity; his modesty into humility; his elevation of purpose into devotion to Christ; his habits of industry into diligence in duty; and his firmness into conscientious obedience. This stamped his virtues with immortality, and made his bright career on earth an opening into unfading glory in heaven. "All flesh is as grass, and all the glory of man as the flower of grass. The grass withereth, and the flower thereof falleth away. But the word of the Lord endureth for ever, and this is that word which by the gospel is preached unto you."

The word of the Lord first took perceptible and permanent effect in his mind early in the year 1838, at the

commencement of a revival of religion in this town, when he was in his sixteenth year; but it was not till the summer of 1841, that, as he supposed, he truly and heartily yielded himself to God, in the faith of our Lord Jesus Christ. The sudden death of a companion roused him from his indecision to give his mind to eternal things, and by the Holy Spirit, soon resulted in his conversion, and the following autumn, in his public profession of religion, which ever since, at home and abroad, in private and in public life, in his early and later relations, in the even tenor of a consistent, Christian life, for these eleven years, he has maintained and adorned. Conversant as his studies led him to be with the laws of nature, he did not overlook the God of nature, and in his professional lectures, he was not forgetful of referring his hearers to the manifestations of the Creator, in the works of his hand, which he led them to examine; and their relations to him as the objects of his beneficence and the accountable subjects of his government.

When he came to die, his religion did not fail him. Just entering upon a profession to which he was enthusiastically devoted; meeting in it with unlooked for approbation and success, and seeing a boundless field of research and discovery opening before him, we do not wonder that he desired to live; nor that, when he could not but know the dangerous nature of his disease, he

was yet unwilling to believe that it would prove mortal. Until a few days previous to his death, his hopes, and probably the tenor of his thoughts, turned on living; still when told plainly that it was thought he would soon die, he was not discomposed. "This is sudden," he said, "and is it really so? does the physician think so?" Being answered in the affirmative, he said, "then leave me a little while to myself,"—and closing his eyes he seemed to give himself to reflection and prayer, till some half hour had passed—when, turning himself to his wife at his bedside, he exclaimed—"glorious immortality!" and from that moment he manifested no further care for life, or any thing pertaining to it, but with the tenderest affection to all about him, and ardent breathings after heaven, he waited for his departure.

With two or three reflections I shall conclude.

1. The Providence of God was remarkably manifested in leading on our departed friend in his distinguished course. Though more than most young men addicted to forethought and system and perseverance — his final course was altogether aside from any original plan or design of his own, or any of his friends. The first design concerning him was his education at college; when this was abandoned, it was, that he should become a farmer; and when first he went abroad to qualify himself as a teacher, little did he, or others, suppose that while yet in

his youth, he would be so widely known and esteemed both as a teacher and an author. And yet, now we see that all the steps in his path, from his earliest years, tended to this, as though they were planned with reference to it, and prosecuted with the exactest care. Well did the prophet say: "O Lord, I know that the way of man is not in himself. It is not in man that walketh to direct his steps." Well, too, does the voice of wisdom cry: "Trust in the Lord with all thine heart, and lean not to thine own understanding. In all thy ways acknowledge him and he shall direct thy paths." There is a Providence in the affairs of men, which we must be blind not to see, and sottish to refuse devoutly to acknowledge.

2. The same Providence that conducted him in his course of life, must be acknowledged in its termination by death. The one of these involves the other. There could be no divine hand in overruling the changes of his life, that did not equally decide the last great change in his death. We admire the goodness of the one. Let us bow to the sovereignty of the other. "The Lord reigneth, let the earth rejoice. Clouds and darkness are around about him: righteousness and judgment are the habitation of his throne." "He giveth not account of any of his matters, and who will say unto him, what doest thou?" It is for himself to explain the mysteries of his government, and for us to wait, in submissive silence, the ap-

pointed hour,—knowing that his ways are right, and his counsels wise; that light is sown for the righteous, and gladness for the upright in heart; that whatever darkness may for the present veil his designs, the cloud will be removed; it will be seen and confessed that he hath done all things well.

Finally, this affecting death renews to us the admonition so often repeated of the vanity of man as mortal. Only a few months since, there was scarcely a young man in our country, whose condition the deceased would have preferred to his own. Now, how changed, and but for that which is above what flesh is heir to, how vain to him now were the advantages, the acquirements, the fame, and the virtues themselves, by which he was distinguished! Blessed be God, there is a life, "unmeasured by the flight of years. There is an inheritance incorruptible, undefiled, and that fadeth not away." There is a glorious conqueror, standing on the ruins of two hundred generations, and proclaiming, "I am the resurrection and the life: he that believeth on me, though he were dead yet shall he live. Whosoever liveth and believeth on me shall never die." May you all aspire to that nobler life. May you all believe in him who holds out to you the heavenly gift. Suffer no delay; for on your immortal being hangs the dread alternative of eternal life or eternal death. Trust not to youth, to health,

to a course of prosperity unbroken in the past, or to prospects yet brightening in the future. Think of him who had all these to lean upon and who now lies silent in the grave. No, not silent; for "being dead he yet speaketh;" and the accents are, "my days are past, my purposes are broken off, even the thoughts of my heart." "Cease ye from man, whose breath is in his nostrils, for wherein is he to be accounted of?" "Trust ye in the Lord forever; for in the Lord Jehovah is everlasting strength." Amen.

BIOGRAPHICAL SKETCH

OF

JOHN PITKIN NORTON.

BY

PROF. WILLIAM A. LARNED,

OF YALE COLLEGE.

JOHN PITKIN NORTON.

From the New Englander for Nov., 1852.

Since the publication of our last number, Yale College has been called to suffer a severe loss in the death of Prof. Kingsley and of Prof. Norton. Our readers will expect from us, we presume, some account of these gentlemen, the one of whom was so well known from his labors of fifty years in the cause of sound learning, and the other from the promising commencement of labors, which bid fair to be long protracted and extensively useful.

The death of John Pitkin Norton is one of those events of Divine Providence, which are designed as "trials of faith," and tests of the infinite value of eternal hopes. In the case of those who are removed from life, not until they have completed their appropriate work, we mourn, but not because we see plans unfinished, aims frustrated, and the unity of life marred and broken. We miss the friendly greeting, the trust of well-tried affection, the communication of knowledge and counsel; the habitual associations of our lives are sundered, and we are saddened at the natural suspension, only a suspension we may hope—of

the offices of love and friendship. But when those are taken away who have made faithful preparation for the responsibilities of manhood, and have just commenced the serious business of life, with the fairest prospects of success, we mourn besides for plans broken off, labors unfinished, hopes disappointed, affections crushed in the bloom, and, in this reversal of the ordinary course of nature, we can only bow with reverence before the mystery of Divine Providence.

We attempt a memorial of our friend, not alone from personal considerations, but on account of his pure moral and Christian character, and also of the service, which, in his short course, he rendered to his country, in the earliest establishment, in our land, of a Collegiate School of Agricultural Chemistry.

John Pitkin Norton was born at Albany, N. Y., July 19, 1822. In 1835, the family returned to its ancient seat in Farmington, Conn., and he there received his early education in the well-known school of Simeon Hart. From an early period, young Norton was a student of nature. For his was one of those minds, which have in their original structure, a decisive impulse towards a definite course of action—an inclination towards a particular form of development. This aptitude, however, was not for the mere enjoyment of nature, a poetic impulse simply; it was rather a philosophical turn of mind,

which led him to the observation of the material world, and of the phenomena of animal and vegetable life. He *studied* as well as *enjoyed*—he *reflected* as well as *saw*. This disposition is sometimes misunderstood. An intense but quiet interest, such as youth of a particular bent of genius possess, often produces an indifference to studies out of a certain range. There is activity of mind enough and power enough, but it is not manifested in the usual way. It has been said of several men of great genius, that they were dull in youth. This we apprehend is a mistake. Such are merely *inactive* where others are *active*; the stream flows, only not in the usual channels, and all the deeper for flowing by itself. That boy is not inactive, a mere idler, who lies upon the ground by the hour, watching the spider spin its web, or the insect wing its flight, or even the worm trail its way on the slime. He is not an idler who follows the bee in its industrious toils, and the birds in their busy pleasures, to learn their ways of life. He is not an idler, who gathers the pebbles and the crystal stones, not as playthings to be admired, but as objects to be arranged, and somehow put into classes. Mr. Norton belonged to this order of minds. He had an original genius for natural science; he took an absorbing pleasure in the observation of natural objects. We were much interested in an account of his first scientific study, which we received from Theodore Dwight, Esq., of New

York, who had the direction of his studies the first winter he was sent from home to school. Mr. Dwight says: "In my first interview with John, I found he had a decided aversion to every branch of study, especially Latin and Greek. I sought for some pursuit in which he might feel some interest, but went through the whole range of sciences and literature without success, when at last I mentioned mineralogy. There I found him alive, and willing to answer questions, and I soon learned that he, for two years or more, had appropriated his money to the purchase of minerals, and had a large collection. I inquired anxiously how he had arranged them; and he replied that he had made three attempts to arrange them, according to their colors and names, and had found that they *could not be classified* by anybody. I assured him of the contrary, and told him that the proper principle was that of their composition. He immediately inquired how any person could know what stones are made of. I explained, in a simple manner, analysis and synthesis, and promised him that he should begin the next day to decompose minerals, and (what pleased him more, although he did not half believe it possible) compound and form some himself." Henceforth, there is no want of interest in his studies; and from the hour of this conversation, he became one of the most hard-working scholars of his time. A certain modesty of disposition, and a diffidence

of himself, which was increased by his inaptitude to the ordinary studies of the schools, had hitherto hindered the free, natural development of his powers; and he did not get upon the right track, till the sagacity of Mr. Dwight pointed it out, and set him forth upon it.

It had been determined he should be a farmer. It was his own choice, and his father had readily acquiesced in it, although very wisely making it a condition of his assent, that he should be *educated for that business.* It may seem strange that we give prominence to this circumstance. But a specific education for the pursuits of the agriculturist, on a broad scale, was a thing almost unknown at that time in this country, and if it is more common now, it is in great part owing to this very example. This education was to be no superficial one; it was to be both practical and theoretical. The summers were to be spent in work, and the winters in study. We will draw out the course of his education a little in detail, as we think it a very good one, and it may suggest valuable hints to others. The farming season of 1838 was spent with E. C. Delavan, at Ballston Centre, N. Y., who had an extensive farm, worked by intelligent Scotch laborers, with whom he was employed almost constantly. The fall and winter of 1838–39 was passed in Albany, studying French, mathematics, music and drawing. The working season of 1839 was spent on his father's

farm in Farmington, and the following winter in Brooklyn, N. Y., under the direction of Mr. Dwight, to which we have already referred. The next summer (1840) was spent in Farmington, in work on the farm, and the following winter (1840–41) in New Haven, attending lectures upon chemistry, mineralogy, and natural philosophy. We must not omit to mention also, that he attended the lectures of Dr. Taylor, on theology, for, though it is a part of an agricultural education which might be omitted, it seems like going back to a better age, to behold the science of theology brought within the range of the studies of a well educated man. Mr. Norton made this year his first public effort. He delivered a well written and interesting lecture before a Lyceum, in the place of his residence, upon the subject of birds, and defended their cause so well, as to secure the passage of a law, at the next town-meeting, for their protection. The summer of 1841 was spent as usual on the farm, and the winter (1841–42) at New Haven, in the laboratory of the Professors Silliman. The next summer (1842) was passed at home, and the following winter (1842–43) in Boston, where he attended courses of lectures on chemistry and anatomy, and also the lectures of Doct. Harris, on entomology, and of Prof. Greenleaf, on law. The summer of 1843 was spent in Farmington, and this season he took the entire charge of a portion of his father's

farm, trying the experiment of farming on his own account. The winter of 1843–4 was spent in New Haven, again in the Yale College laboratory, under the instruction of the same distinguished teachers.

The extensive course of study which Mr. Norton had been pursuing for the past six years, had opened before him a new and wide field of usefulness. He felt the necessity of a more specific course of agricultural education than could be obtained in this country, and he determined to prepare himself to become an instructor in Agricultural Chemistry. This was done with no ambitious views of attaining to any higher distinction, but solely with the purpose of making himself more useful to the agricultural community, whose interests he had identified with his own. Agriculture was the first pursuit that strongly awakened his feelings, and the promotion of its interests was the ruling purpose of his life. Rarely have the powers of any individual been more exclusively devoted to one great end, than were those of Mr. Norton to agriculture.

Having determined to prepare himself to give instruction in agriculture, he resolved to make that preparation as complete as possible. All his plans in this respect were fully approved by his father, who from the first had taken the most enlarged views on this subject. After due inquiries, he decided to go to Edinburgh, and an ar-

rangement was made by Prof. Silliman with Prof. Johnston, the distinguished professor of chemistry, in the laboratory of the Agricultural Chemical Association in Edinburgh, to receive him as a pupil. He left this country in the spring of 1844, and remained in Edinburgh till the spring of 1846.

Mr. Norton was well prepared to take advantage of the valuable instructions now within his reach. He had been a diligent student for six years—a period sufficiently long to have carried him through a collegiate and almost a professional course of study; for the interruption by the labors of the summer, would not amount to much more than the usual vacations in college and professional schools. He was quite well acquainted with the French language, and could read German with ease. He had enjoyed the best instruction in chemistry which the country afforded, and was, indeed, already a good practical chemist. He felt too that he was now entering upon an extensive field of usefulness—that he was laboring in the service of his country—and that on his return, he would possess a power for good within his sphere which would perhaps belong to no other one of his countrymen. He entered upon his studies, therefore, with the greatest enthusiasm. He spent all the working hours of the daylight—from nine o'clock in the morning till six in the afternoon—without interruption, in the laboratory, while

the evening till midnight uniformly, and often later, was devoted to reading in French, to chemical studies, writing for agricultural journals at home, in addition to the journal which he kept for many years, and the long family letter which was weekly forwarded to his home. And we hesitate not to say that this correspondence and journal, if they were to be published, would make as interesting and instructive a volume of foreign residence, as any one that has been published by our countrymen. Such was the ardor with which he prosecuted his chemical researches, and so closely did he confine himself to his single pursuit, that even the romantic scenery around Edinburgh and the neighboring places, famous in song and story, could not draw him from the laboratory. It was not till the arrival of a friend from America, that he visited the objects of interest in Edinburgh and its environs. Nor did this devotion to his studies arise solely or mainly from the ambition of distinction. It sprang from a higher principle, a principle of duty, which ever controlled him. "It seems to me a duty," he said, in writing to a friend, "to keep one object in view—diligently to improve the extraordinary advantages of my situation. This can only be done by withdrawing my attention from other objects, and devoting every faculty to this alone. I feel sure that I am fast laying up a store of knowledge, that under the pro-

vidence of God, will make me to be of much use in my own country. The field opens wider and wider as I advance, and I often feel discouraged at the mountain of labors which rises before me." These were not idle words. They meant all that they express. We have never known the man whose conduct was more governed by a sense of duty.

These unremitted labors were not without their results. Mr. Norton soon attained to great accuracy in his experiments, and his analyses could be entirely relied on as faithfully made. He shunned no toil, he concealed no mistakes. If any analysis did not come out as it should have done, he knew not the art of conjecturing what the figures should have been, but went over with the work again. His progress was such, that Professor Johnston advised him to prepare papers for the British Association, which he did. Two papers of his were read at the meeting of that body in Cambridge, and were well received. By the advice of the same judicious instructor and friend, he entered into a very minute analysis of the oat. These investigations cost him the labor of almost eighteen months, and when they were completed, the memoir was presented to the Highland Agricultural Society, and received the prize of fifty sovereigns, which it had offered for the best essay on the subject. We can not give to the uninitiated anything like an adequate conception of the labor expended upon these researches. We may say in

general, using the language of the Journal of Science, in which the memoir was republished, that "commencing with the young plant, he followed it through its successive stages of growth and development to its maturity. The results are presented in thirty-nine tables, containing hundreds of accurate and minute analyses, giving the composition of the oat from the different parts of the plant, separately, viz: the leaf above and below, the stalk, the knots, the grain, &c., besides the organic constitution of the grain." This is by far the most thorough examination of the oat which has ever been made—and his labors possess the advantage that subsequent inquirers may implicitly rely upon them, and begin where Mr. Norton left off.

But beside the scientific labors of the laboratory, Mr. Norton made many agricultural excursions in company with Prof. Johnston, into different parts of Scotland and England, in which they examined the best cultivated farms in the kingdom. Mr. Norton's personal experience in farming, enabled him to turn these visits to the greatest advantage. He also attended agricultural festivals, and was called up for speeches at the festive boards. Full accounts of these expeditions were published in the Albany Cultivator, of which he was a regular correspondent during his residence abroad. His opportunities in this respect were unsurpassed, and the practical know-

ledge which he thus gained of Scotch and English farming, he applied with great judgment to the different circumstances of agriculture in this land. For the great advantage accruing to him from these expeditions, he was indebted to Prof. Johnston, by whose means he was introduced into the society of agriculturists, which would not usually be accessible to young students from abroad. Indeed, we can not leave this part of our subject, without expressing the gratitude which the friends of Mr. Norton feel, and which we know he always felt, to Prof. Johnston, for the fidelity with which he directed and watched over his studies, for the kindness which he manifested towards him in the social relations of life, and for the interest which he took in his reputation and success as a man of science.

While in Scotland, Nr. Norton worshipped in the Free Church, and rejoiced in the enthusiasm and martyr-like spirit, which accomplished that wonderful movement. He heard most of the distinguished preachers of that church. Sunday was ever to him a day of enjoyment, and though a stranger to his fellow-worshippers, he was always present at church, joining his voice with the congregation in their praises of God. Mr. Norton returned with a very high estimation of the Scotch people. In one respect, however, he found himself not a little at variance with them. He had grown up in the most un-

qualified observance of the strictest temperance pledge, and it is not known that he ever, except as a child, tasted any alcoholic liquors. He also had been trained to the early New England strictness, in keeping holy the sabbath day. In his various excursions and visits, his principles on each of these points were severely tried, but in no single instance did he in the least degree deviate from them. Nor was this with him a matter of singularity or a proud defiance of public sentiment. It cost him, on the contrary, as appears from frequent reference to it in his letters, a very great sacrifice of feeling. But it was a question of duty, and he firmly did what he thought to be right. And this was not without its reward, for he afterwards had the satisfaction of knowing that his example had a beneficial influence in two or three particular cases. But, universally, Mr. Norton was a strictly conscientious man, and the severity of his daily studies was never permitted to interfere with his religious duties.

Mr. Norton returned to this country in the spring of 1846, having first made a flying visit to the continent with reference to pursuing his studies in some one of the celebrated laboratories there.

On Mr. Norton's return to this country, it was thought important to secure the services of so able and valuable a man to Yale College. Professor Silliman, Sen., with his usual promptness in the cause of science, took the

matter in hand, and appearing before the corporation, at their annual meeting, at commencement, in 1846, presented the importance of having such a professorship in some way connected with the college. This proposal was made at a most fortunate time. It had long been the wish of the college officers to have a department, in which some of the collegiate studies, such as philosophy, philology, pure mathematics, and the like, might be prosecuted by graduates under systematic instruction, and in which also, not only graduates, but others not graduates, who should be properly qualified, might be trained to fulfill in a manner creditable to the country, the office of the civil engineer, of the scientific miner and geologist, of the scientific agriculturist, and the like; thus furnishing society with a body of highly educated men, in its various departments, and introducing in fact, new liberal professions among the learned professions. This movement in behalf of the physical department, fell in with this long cherished desire; the matter was discussed on general principles; and from this discussion arose what has since been called, *The Philosophical Department of Yale College.* As we regard this movement one of great importance to the college, and to the country, and as Mr. Norton was the founder and architect of one of the most important branches in this department, we have thought it best to put on record all the documents relating to this subject.

The first document is the resolution of the corporation, establishing two new professorships, passed August 19, 1846:

WHEREAS, it has been represented to this corporation, that a benefactor of the college proposes to give five thousand dollars for the endowment of a Professorship of Agricultural Chemistry, and of Vegetable and Animal Physiology, provided that twenty thousand dollars be raised for that purpose:

Resolved, That there be established in this college, a Professorship of Agricultural Chemistry and of Vegetable and Animal Physiology, for the purpose of giving instruction to graduates and others not members of the undergraduate classes: and that the corporation will now proceed to elect a professor of those branches of science, that while efforts to complete the endowment are in progress, he may devote himself to studies preparatory to his entering on the duties of that office—it being understood and provided that the support of this professor is in no case to be chargeable to the existing funds or resources of the college.

Resolved, That there be also established a Professorship of Practical Chemistry, for the purpose of giving instruction to others than members of the undergraduate classes, in respect to the application of chemistry, and the kindred sciences, to the manufacturing arts, to the exploration of the resources of the country, and to other practical uses; and that a professor be now appointed to that office, whose compensation, till other provision can be made, shall be derived exclusively from fees for instruction, and for other services.

Resolved, That President Day and Professors Silliman, Kingsley, Olmsted, Woolsey and Salisbury, be a committee to report at the next annual meeting of the corporation, or at any intervening meeting which may be convenient, their opinion of the expediency of arranging under a distinct department of the university, those courses of instruction which are or may be given to others than members of the undergraduate classes, and which are not included in the departments of theology, law and medicine, and that if in their opinion such a department is expedient, they report such arrangements and regulations as may be requisite for the full organization of the department.

These two professorships were filled by the appointment of Mr. Norton to the former, and of Mr. Benjamin Silliman, Jr., to the latter. Instruction in these professorships was postponed till the year following. We may remark that Mr. Norton did not accept a professorship in Vegetable and Animal Physiology, although his name appears as professor of those branches in the college catalogue of that year.

We give next the report of the committee, whose appointment is recorded in the preceding resolution. It was presented to the corporation, August 19th, 1847, and accepted:

"The committee appointed by the corporation of Yale College, to consider whether it is expedient to form a fourth department in this college, for the instruction of other than undergraduate students, beg leave to report:

That in their judgment it is expedient to form such a department, and that for several reasons. Some of these reasons are:

1. That there is a demand on the part of our graduates and others, for instruction in particular lines beyond what is wanted, or can be given in the college course.

2. We have several endowed scholarships for graduates, and are likely to have more; and the advantages arising from these endowments, will be greatly increased by having instructions provided for the scholars upon them, and not leaving them to themselves.

3. From time to time new branches of study are called for by the public; which if introduced into our undergraduate course, would greatly crowd it and interfere with its object as a course of training for the mind.

4. It is believed that students resident here for the purpose of pursuing a specific branch will be industrious, and will have a good effect in promoting the spirit of study among the undergraduates.

5. We have at present the materials of such a department here on the ground. It is believed by your committee, that some system introduced into them, will greatly add to their usefulness.

Your committee being also charged with the duty of reporting *regulations* for the organization of said department, should it be judged expedient to form one, beg leave to report the following:

1. There shall be a fourth department of instruction for other than undergraduate students, who are not in the departments of theology, medicine, and law, to be called the Department of Philosophy and the Arts. The department is intended to embrace philosophy, literature, history, the moral sciences other than law and theology, the natural sciences excepting medicine, and their application to the arts.

2. Instruction in this department may be given by professors not belonging to the others, by professors in the academical departments, and by such others as the president and fellows may approve. But no second course of lectures on the same branch may be given, without the consent of the previous lecturer.

3. All graduates of this or other colleges, and all other young men of fair moral character, may be allowed to pursue such studies included in this department as they may desire. But dismissed students of this or other colleges, and undergraduate students, without express leave of the academical faculty, shall not enjoy the privileges of this department.

4. The instructors in this department may make such arrangements as it respects remuneration for their instructions, as they may think proper.

5. The faculty of the department shall consist of the president, and such professors as are actually engaged in the instruction of the department; and regulations passed by the faculty, and approved by the corporation, may be the regulations of the department."

It will be noted that there was no provision made for conferring degrees in this department, as is done in the departments of law and medicine. This was postponed for farther consideration. We will here anticipate the course of events, and present the doings of the corpora-

tion in establishing the degree of Bachelor of Philosophy, in this department. Through the influence and exertions of Professor Norton, a petition was presented to the corporation for the establishment of such a degree, at their meeting in July, 1851. A committee, consisting of President Woolsey, Dr. Day, Professor Kingsley, and Professor Norton, was appointed to confer upon this subject, and to report at the next annual meeting. The following is the report:

The committee appointed last year to prepare *rules* for giving degrees in this department, if they should deem the giving of such degrees expedient, report the following rules:

1. Students in this department of the age of twenty one years, who have resided at the college two years, and have pursued their studies for nine months in each year, may receive on examination the degree of *Bachelor of Philosophy.*

2. The examination shall embrace, at least, three branches of study, and a certificate of the examiners must be produced to the effect, that the examination in each branch has been satisfactory.

3. This examination in the case of students in the physical sciences, shall embrace two departments of physical or mathematical science, and either the French or German language.

The fee for graduation shall be the same as for Bachelors of Arts, or Bachelors of Laws, whereupon, *voted* to adopt the foregoing as rules, under which degrees in this department shall be given.

In the consideration of this subject, the committee had the advantage, it is proper to remark, of the experience of Harvard and Brown, where degrees of this kind had already been established. The degrees were conferred

at Yale, for the first time, at the commencement, in July, of the present year.

We would call the attention of our readers to two or three points in the establishment of this new department in the college.

In the first place, it was put upon the same basis as the professional schools of theology, law, and medicine, and is to be regarded as a fourth *professional* school. It was intentionally separated from the college proper, or the academical course of instruction. The principle, laid down in the reports to the corporation, written by President Day and Professor Kingsley, on the subject of the study of the classics, that a *collegiate* education is merely a preparation for a *professional* education, a *general* course of study fitting the student for any *specific* course which his chosen pursuit of life may require, and that the two should not be intermingled, was strictly observed. Pains were taken not to introduce any partial or half-way system of education into the four years collegiate course. It was hoped, on the one hand, that there would be some, as there have been, who would become professional scholars in the departments of philology, philosophy, mathematics and the like; and, on the other, that there would be a large number of graduates, who would prepare themselves, by a strictly professional course of instruction, for those pursuits of

life, other than theology, law, and medicine, which require a peculiar education. This has been the case to some extent, and the tendency in that direction is increasing. It is beginning to be felt that college education, in the discipline of the powers and the balancing of the faculties of the mind which it gives, not only does not disqualify, but lays, in general, the best foundation, for the after education of the scientific farmer, of the enlightened merchant, and of men in the various departments of active life, which manufactures, rail roads, mining, and the like, open to the educated.

In the second place, the establishment of this new department recognized the fact, that there are very many in the community, who for various reasons, can not go through with the preparatory studies in a collegiate course, and was intended to give such the best opportunities possible for their professional education. The age (twenty one) which the degree of Bachelor of Philosophy requires, shows that it was regarded by the corporation as a testimonial of a completed preparation for the active duties of life—as in the case with the degrees in law and medicine.

Finally, in the institution of this new department, the corporation of the college proceeded with cautious steps, and with a wise foresight of the necessities of education in our land. Schools of physical science might be dis-

sociated from the university, as is sometimes done. We think, however, that in connecting the departments of agricultural chemistry, of chemical analysis, and of civil engineering, with the general department of philosophy, and making the whole one of the professional schools connected with the college, the corporation have acted with the wisdom which has uniformly characterized their proceedings. It places the interests of the higher education of our land in the hands of those who will give to it an elevated and liberal character. In all these views of the corporation Prof. Norton fully acquiesced. Indeed, his own education, (of which the corporation had expressed their estimate, by conferring upon him the honorary degree of Master of Arts,) had been of too liberal a kind—in point of time equal to the full academical and professional course, and in point of acquisition and discipline not inferior to that of our first scholars—to permit him to wish for a low standard. It was entirely accordant with his wishes, that the requisitions for the degree in this department were made high.

Mr. Norton returned to Europe in the fall of 1846, and entered the laboratory of Mulder, at Utrecht. His progress here was rapid and satisfactory. He went forward in his analyses with somewhat of the confidence of a master, and he frequently speaks in his letters, with

enthusiasm, of his "beautiful results." He pursued his researches here with the same laborious diligence as at Edinburgh, often being in the laboratory twelve or fourteen hours a day, and reserving the hours of the night, till after midnight, for the study of German and Dutch, for writing for the Cultivator, and for his extensive correspondence with his family and friends. He was again very fortunate in his teacher. Mulder took a great interest in his success, and devised and forwarded useful plans of study for him. During his residence there, he made an agricultural excursion through North Holland, to become acquainted with the practice of farming in that region. He returned in July, 1847, having been with Mulder nine months.

Mr. Norton had now completed his education, and was prepared to enter upon the serious business of life. He commenced his duties as professor in the fall of 1847. He was married to Miss Elizabeth P. Marvin, of Albany, N. Y., in December of the same year, and having the means of living in a liberal and elegant manner, soon became a householder, and took his part in all the duties of social life. Universally esteemed in society, beloved by all who knew him, and uncommonly happy in his own home, he began life with the fairest prospects.

The philosophical department, as we have already

remarked, embraces several branches of study. Most of these had for some years previous, been more or less pursued by a few of the graduates of the college, and by others. Some had studied philology, philosophy, and mathematics; there had been several scholars in the laboratory. The only effect of the establishment of the new department as to these, was, to give more system to the instruction. There were no new professorships in them. The professorship of practical chemistry was a new one, and would have become an important department, had not Prof. Silliman, Jr., been early called away to a wider field, in the Medical College, at Louisville, Ky. We shall, therefore, limit our subsequent remarks to the single professorship of agricultural chemistry. Indeed, the philosophical department, so far as it was new, rested entirely upon that professorship.

We are to speak now of the work which he accomplished, in the few years of manhood—a little less than five years—which were allotted to him. The department of Agricultural Chemistry was to be created. It was new in the country. It was doubtful whether the public sentiment was strong enough to support it. The external resources for such an undertaking were sufficiently humble. The professorship was without a salary, and no better laboratory could be furnished than the wooden house on the college grounds, formerly

occupied by President Dwight, and afterwards by President Day. But Professor Norton was well fitted for the work he had undertaken. His acquaintance with the operations of the farm, gained by personal experience, his good sense and sound judgment, and his simple and gentlemanly bearing, won the regard of the farming community; and he took unwearied pains, through addresses, lectures, more formal treatises, and numerous publications in agricultural journals, to disseminate elevated views of the necessity of scientific knowledge to the farmer. His influence was extensively felt, and was becoming stronger every year. Within the school, the more immediate sphere of his labors, his influence was equally great. He was a most admirable instructor. His hopeful, joyous, sympathetic disposition, his great equanimity, his pleasant, familiar manner, his quiet humor, rendered his presence in the laboratory always agreeable to the scholars, while his interest in their studies and welfare awakened a strong personal attachment. Although discouraged at his first attempts, he was fast becoming one of our best lecturers. He had firm possession of the knowledge he had acquired, and was thus able to give precise and definite information. His natural opposition to vain show kept him from the folly of professedly fine speaking and rhetorical declamation, while the deep interest he felt in his subject,

led him to communicate all the knowledge possible in the hour, and by perspicuity of style and skill of arrangement to make it the most available to the student. We have the testimony of the best scholars that they attended no lectures where they got more information. The number of scholars the first year was small, but it each year increased, till at last the experiment of the school was decided, a new department of professional study in the university was created, and a liberal and scientific pursuit opened to the young men of our country. And it is due to his memory to say, that during these five years of incessant toil, he received no salary whatever, and that the remuneration from tuition, after paying necessary expenses, would not amount to the wages of a day laborer. At the same time he had been offered a foundation of twenty thousand dollars, in one of the large colleges of the country, with a salary of three thousand dollars, if he would devote himself to chemistry in its application to the arts; and from time to time other lucrative places were pressed upon him. He however regarded the interests of agriculture as paramount to all others, and was not to be diverted from his devotion to them. He had chosen Yale College as the best place for the establishment of such a school as he was desirous of founding; he had there principally received his education, and he was

deeply interested in its welfare. Indeed, when we consider how much he gave up in rejecting the large salaries which were offered elsewhere, and how much he expended from his own resources in the five years of his unpaid labors in the institution, amounting of course to many thousand dollars; and his generous bequest, made within a few hours of his death, of all the apparatus of the laboratory, together with the books and other articles (valued at more than $2000), we place him prominently among those benefactors who, besides their services, their scientific and literary reputation, and their lives, have given most generous donations to the college.

But his instruction in the laboratory was only a small part of his labors. His publications were numerous, and of permanent value. He was a frequent writer for agricultural journals. He had been a more or less frequent writer for the Albany Cultivator from 1844, but in 1850 he commenced a new series of letters, which, the editor says, constitutes "one of the chief attractions of the Cultivator." He also delivered numerous addresses before agricultural societies, in different parts of the country. Eight or nine of these have been published. His last public effort was the introductory to the course of lectures," at the opening of the University of Albany, N. Y., in 1851. All these are written with perspicuity,

and contain much valuable information. But his most important work is, his Elements of Scientific Agriculture. This essay was written for the prize offered by the New York State Agricultural Society, and was successful. It is a most admirable treatise. We said, when it was first published, that it deserved to be placed in the hands of every farmer in the land, and we think still it is the best treatise, for the object it had in view, which has ever been written. The more it is examined, the more its value will appear. His last work was his edition of Stephens's Farmer's Guide, to which, by the particular desire of the Edinburgh publishers, the Messrs. Blackwood, he added notes and an appendix, which would of themselves make a small volume, and which much increased the value of the original work. We most fully agree with the editor of the Cultivator, that Professor Norton was, "the most practical agricultural writer and thinker of the present time, and that his efforts promised more permanently beneficial results than those of any other man." Nor was his more strictly scientific studies neglected, though, judging it important, first of all, to awaken an interest in such studies by the dissemination of agricultural views, founded on science, he had not devoted so much time to this branch of his department as he would afterwards have done. What he did publish, however, was valuable. We mention, Researches

and Observations on the Potato Disease, published in the Journal of Science, vol. ii, 281; iv, 70; On the Proteine Bodies of Peas and Almonds, published in the same Journal, vol. v, 22; On the Value of Soil Analysis, and the points to which special attention should be directed, read before the American Association at Albany, August, 1851, and published in their proceedings. In this paper, he was aided by William J. Craw, first assistant in his laboratory. This was his last contribution to science, and the elevated views which it contains of the high office of the scientific man, in relation to agriculture, only make more manifest the loss science has suffered in his death.

But we draw nigh the closing scene. The session of 1851 was the most prosperous one his school had enjoyed, and it was now made certain that a large chemical school would grow up under his auspices. At the same time, he took a deep interest in the projected University of Albany, in which agricultural chemistry was to have a prominent place, and agreed to deliver a course of lectures in that city, on that subject. Every thing was now prosperous with him. Useful, honored and beloved, he enjoyed the present, and saw before him an equally honorable and useful future. But, alas! his days were numbered, and he was approaching the grave. On his first journey to Albany, he spit a little blood in

the cars. Thinking little of it, he gave his lecture as if nothing had happened. He raised a little blood several times afterwards; at last, the hemorrhage became so great, as to cause anxiety. A council of physicians was called, who pronounced the case alarming, though not hopeless, and advised a sojourn in a warmer climate. He went with his brother to Florida, and there somewhat recovered. But on his way home he took the measles in the city of Washington, and was much worn by the attack. On his return to New Haven, he looked better. He continued improving somewhat through the summer. He himself, as usual, was hopeful, though friends were fearful. He was able to do a little. His last public labor was conducting an examination of several of his scholars who were candidates for the degree of Bachelor of Philosophy. It was, perhaps, too much for him, but he felt a deep interest in the matter, as it was the first time of conferring degrees in that department. His last act in the service of his school, was indeed all that remained to its complete establishment, as an institution giving both the reality and the recognized title of a professional education. About commencement, he was seized with a violent hemorrhage—recovered somewhat—went to his father's in Farmington—and there died, in the bosom of his own family. But how did he die? How endured he to relinquish

his promising plans of future usefulness, and quench these hopes in death? How endured he to leave the home of affection, filled with every earthly bliss? He resigned them all cheerfully, even exultingly. When informed at Albany, in the latter part of the day, that his case might terminate fatally, he slept that night as soundly as if he had been told he would soon be well again; and when his wife, thinking he *must* have misunderstood the decision of the physicians, asked him if he knew what the physicians had said, he replied that he did — it was the will of God, and he would do what was best. When again, twenty-four hours before his death, the same faithful friend broke to him the message from his physician, that he had but few hours to live, he said, this is sudden, and begged, as his head felt confused, to be left to himself a little while. He closed his eyes, and continued in prayer and meditation for perhaps half an hour, and then opened them, exclaiming, "O glorious immortality: all is peace;" and, from this moment, spake of his departure with all the cheerfulness of one who was about to set out on a pleasant journey. On Sunday morning, the day of his death, contrary to the expectation of the family, who supposed they had taken their last earthly leave of him, he opened his eyes, which beamed with their wonted animation and cheerfulness, and he spoke to them all again with a kind of

heavenly composure, and then fell "on sleep." He died on the 5th of September, 1852, aged 30 years.

Although in the account of his life, we have indicated the principal traits in the character of Professor Norton, we wish, for the sake of the example, to dwell upon them a little longer.

His mind was characterized by strong powers of perception and observation, by the capacity of long continued attention, and by sound practical judgment. He possessed in combination many of the qualities which belonged to his distinguished progenitors, Governor John Treadwell and Senator Timothy Pitkin. He took liberal and comprehensive views. His opinions on all subjects were judicious. There was an uprightness of mind which kept him from being misled by prejudice or fanciful speculations. For the same reason, whatever he undertook turned out well. He had no useless knowledge; he wasted no time in chance wanderings over the field of science; he studied with definite and well matured aims. There was also a certain joyous activity of mind, which made hard study in his favorite pursuits a positive delight. Nor was he deficient in fancy and imagination. He took a deep interest in the fine arts, especially in music, of which he was no mean proficient. And over all this there was thrown the charm of a quiet

humor, mellowing the firmer and more serious parts of his character.

Professor Norton was a thorough student. He was a model in this respect. His time was systematically divided, and each portion scrupulously spent in its allotted work. There were no idle moments; no waste time. Whatever was to be done, was done at once. He carried the prompt habits of a business man into his study. It is a peculiarity which distinguishes student life from a life of business, that it is possible much more frequently to postpone the labors of the day to a future opportunity. Every student forms plans of study, but there are few who do not suffer them to be broken in upon or frustrated. But we should as soon have thought of the merchant postponing the payment of a note till after banking hours, as of Professor Norton postponing the allowed work of the hour to another time. Professor Norton studied with the pen in his hand. No German student could excel him in the diligence with which he took notes of the lectures he attended, or recorded his own observations on what he was studying. He composed with great facility and in a good style, and was fond of writing. He has left behind many volumes of manuscripts. He was in every respect a scholar, thorough, exact, and profound.

As a man, as a member of society, he was every thing that could be desired. The frankness and ingenuousness of his disposition, his genial good humor, and gentlemanly manners, made him a favorite in the social circle. He was always interested in the details of social life, took part in all innocent amusements, and having worked hard enough and long enough, in his study, he left his toils behind him. He enjoyed life himself, and helped others to enjoy it. What he was in the dearer and more intimate relations of life, we will not attempt to describe; there are joys, there are sorrows, which even near friends may not enter into.

But, after all, it was as a man of Christian principle, that Professor Norton was most conspicuous. He early united himself with the Christian church, and Christian principles controlled the actions of his life. His firmness under trying circumstances has already been mentioned. But the same firmness was seen in every thing. He was always on the right side; no one ever doubted on any moral or religious subject, where he would be found. He made the Bible the man of his counsel, and the guide of his feet, and he governed his household according to its precepts. His life had been an uncommonly happy one. Prosperity smiled upon him. We have never known the individual who was so uniformly blessed of Providence, in all his undertakings. And yet, at the unexpected

summons, in the morning of life, and with every thing to live for, he was ready—he was cheerful. If he had a care, it was for those he was to leave—for the aged and venerable grandmother, who leaned upon him—for the father who had done so much for him—for the family circle which surrounded him—for the wife of his tenderest affections. He knew, he did not strive to conceal from himself—the pangs that would pierce them; and the thoughts that were diverted from Heaven, were for them, to comfort and console them.

His affections clung around his laboratory to the last moment. He spoke of it with the deepest interest. After executing a brief will, he made many verbal bequests, among them the one to the college. "My apparatus and books in the laboratory," he said, "I wish given to the college, if the department shall be continued. I hope it will be kept up; it has cost me a great deal of labor."

The public loss in this death is great indeed. With that intense devotion to one great end in life, in which he stood alone in this country in his department, and we suppose the number of such men is not large abroad; with those habits of diligence which made him master of the vast amount of knowledge, necessary in his profession, and that soundness of judgment which kept him from all speculative schemes: with that confidence which he had already inspired into the agricultural communi-

ty: with the state of agriculture in the land, just in a condition to need and profit by the labors of such a man —with all this in view—we were authorized to anticipate, and we now take pleasure in expressing the anticipation, that he would have risen to the highest distinction in his profession, that he would have reflected high honor upon the college with which he was connected, and that he would have been of the most important service to his country.

But our friend did not live in vain. He accomplished a good work. He left a name without a blot. He bequeathed an example which others may be satisfied to equal. He founded a school, which, in accordance with his dying wish, we trust, the community will not suffer to languish, but will rear up to be his perpetual monument; and in after years, when it shall have risen to widespread renown, and multitudes on multitudes shall have enjoyed its blessings, honored will be the name of John Pitkin Norton, its founder.

From the Presbyterian Magazine.

HOUSEHOLD THOUGHTS.

"GLORIOUS IMMORTALITY!" "ALL IS PEACE."

"He does well who does his best:
Is he weary? Let him rest.
Brothers! I have done my best;
I am weary—let me rest!"

In a retired village in New England, amidst beautiful scenery of nature, stands a mansion with all the arrangements for comfort and happiness. But death is within the doors!

Not now for the first time does the conqueror come. Once before had he entered that Christian home. Then, an aged mother in Israel sunk into her last sleep before the touch of his sceptre. Venerable saint, with thy quiet brow, meek eye, comely bearing, and loving spirit, the house received a glory in being the birth place of thy departure into another world!

It is the sabbath. In one of the upper chambers is a beloved young man, soon to be numbered the second of the dead in that abode of love and peace. The rest of the Lord's day is hushed to deeper tranquility by the premonitions of a fearful providence. A son, the pride

and joy—as well might he be—of his father's heart, is nigh unto death. The faint breathings of a tired frame announce that the last sleep is drawing near. With kind looks to all, and with a firm faith in Christ, the youthful pilgrim closes his eyes on the world.

Household grief at such a time may not be intermeddled with; but theirs is grief which loses not the joy of Christian hope, and which looks away from earth to Christ, resurrection, and glory. As the church bell, which for two centuries has knelled the work of death in that retired Puritan village,* struck on that sabbath its thirty notes, all knew the meaning. Fathers, mothers, young men, maidens, mingled their sympathies and ejaculations; not a few their tears. The venerable pastor's heart thrilled with peculiar tenderness, for a very dear one of his flock had panted away life by the side of the spring—blessed be God, of the *living* spring!

The young man, pale in death, was the *eldest son*. God knows the swelling tides in the human heart. He implanted natural affection, στοργην, the vehement indwellings and outgoings of a father's soul. Parents of a mortal race, ye receive your children for death! The joy which welcomes them into the world has a kindred keenness of

* The custom is still kept up, in many towns of New England, of tolling the bell when a person dies. The number of strokes indicate the age of the deceased.

sorrow in mourning them out of it. We rejoice and we sorrow over them. It is a privilege to have a heart, an overflowing heart, of human tender love. Father, that son deserves well the tears you weep. Over *you* how youthfully would *he* have wept — your eldest, darling child! But the sacred gift is yours to weep for him. May God sanctify that unexpected, inexperienced sorrow.

The youth is a *Christian youth*. On his form of manly beauty lies the death-betokening stillness; for *he* is not there. He is with Christ! At the time of death was he with him in Paradise. Oh, how great the mercy which brings our young men to the cross; which brought *him* there. In the morning of life he renounced all for his Saviour. Trained in the good old way, he walked in it during the opening years of active manhood, pursued religion as the chief end, and was thus prepared to enter upon its everlasting rewards when God closed his earthly course. Few meditations are more welcome to survivors than those which are linked with efforts and prayers to bring departed ones to Christ. The writer gratefully remembers a solemn interview with this dear youth in a retired corner of the beautiful garden out of sight except from the All seeing. His mind was at that time, unknown to me till then, concerned on religious subjects. God afterwards brought him to a full knowledge of the truth. He became a zealous Christian. He was in the

Bible class; his rich, uncommon voice mingled in the choir; he was known as a friend of religion, of temperance, of active benevolence, of social improvement; a promoter of every good work. Happiest now in the work of heaven!

In a brief record of a gifted young man, it is not out of place to say that his *mental endowments and acquirements* were great and beyond his years. His mind was quick, regular, and trustworthy in its operations. It saw and did with consummate precision. The two qualities, however, which enabled him to accomplish so much in his short career were *system* and *perseverance*. At the age of twenty-four he was appointed a Professor in Yale College, and in a new department organized with some reference to his own adaptations to fill it with honor.* He was rapidly acquiring a reputation as a scholar, a philosopher, and a writer.† But what is knowledge? It shall "vanish away!" The young philosopher's chair is unoccupied in his library; the laboratory misses his quick

* The professorship was that of *Analytical* and *Agricultural Chemistry*.

† Professor John Pitkin Norton was undoubtedly the first in his department in the United States. He was a fine lecturer, and had the art of impelling his own enthusiasm into the minds of others. He was much sought after to deliver addresses at agricultural conventions. Several of his addresses have been published, and are admirable specimens of science brought home to the people. He also published several valuable scientific works.

eye and steady hand, and friendly zeal. Human learning is valuable in its place ; but there is a wisdom of a better kind, and more enduring. This and that were both his.

Social traits of a superior character were his ornament among his fellows. His glance was upon life's sunny side. He was of generous temperament, buoyant in good nature, companionable, courteous, modest, kind. In addition to his personal elements of popularity, his ancestral ties bound him to the community. His great-grandfather was good old Governor Treadwell, and his grandfather the Honorable Timothy Pitkin, both of Farmington, the residence of his own honored father, and where he himself had come to die. A large circle of friends, especially in Farmington, Albany, and New Haven, will love to cherish his memory in mourning his loss.

The ways of Providence are mysterious, but not the less wise; often, rather be it said, therefore the more wise. "Precious in the sight of the Lord is the death of his saints." There is no better time to die than the appointed time. God had been preparing his young servant for heaven by afflictions in the death of a child and his own failing health. The soul learns rapidly the lessons of religious experience, when Providence and the Spirit are its associate teachers. Being ready to go why should any wish him to stay ? and having gone why wish him back again ? The 5th of September, 1852, is as good a time

to die as any time in any year a half century hence. The first sabbath of autumn was his last earth-day. On being rather unexpectedly told a few days before that he could not long survive, he requested to be left alone for a season. Not alone! For the family took knowledge of him that he had been with Jesus. His joyful tidings to them from another world were "Glorious immortality!" "All is peace!"

He was buried at New Haven, from the place of his late residence, in that beautiful city. "Great lamentation was made over him;" and he was carried to his last resting-place with the ingenuous grief of a large concourse of friends.

"He does well who does his best;
Is he weary? Let him rest.
Brothers! I have done my best;
I am weary—let me rest?"

"If we believe that Jesus died and rose again, even so them also which sleep in Jesus will God bring with him

The following is a meagre outline of the remarks of President Woolsey, of Yale College, at the grave:

President Woolsey began with referring to Professor Kingsley's late decease; that the college had just lost one, nearly the oldest of its officers, and now it was called to mourn for Professor Norton the youngest.

Mr. Norton was the founder in this country of the science to which he addicted himself, and had attained in his short course to a point where he commanded the respect of men of science. He bade fair to become eminent in his department. He had qualified himself for it by study in Eu-

rope under the most eminent chemists; and had received, even when a student, most flattering testimonials to his skill in chemical analysis.

In speaking of his character, President Woolsey said that he was a man of uncommonly sweet and gentle temper, characterised by placidity and equanimity, to which were united great patience and perseverance in the pursuit of whatever he had undertaken.

He was also a man of great simplicity, very far from love of show, and from pretension. His lecturing was a proof of this, in which he thought nothing of himself, and was entirely engrossed with his subject. He seemed in this simplicity more like a little child than almost any man whom I have known.

He was also a man of great probity. He had a natural straightforwardness, which well became the descendant of some of the worthiest Puritans of Connecticut. He seemed to love truth for its own sake. He was inflexible in doing right, and whenever a point of duty was involved steadily adhered to true principles. This was manifested in his constantly refusing when abroad, and after his return when thrown among worldly men, to do any act looking like desecration of the sabbath, and by his strict temperance principles in all companies, and on all occasions.

But the crowning glory of his character was his religion, which brought out and gave strength to his natural good qualities. In his youth he felt the power of divine grace, united himself with the church in Farmington, and had ever since led a life consistent with his profession. Hence, when the summons to die came, he was not unprepared or thrown off his guard. He was told that there was no prospect of his living, then calmly shut his eyes without a murmur, and on opening them again, turning to his wife who was sitting by his side, said as if he was giving utterance to the closing thoughts of a sweet train, "Glorious immortality!" adding shortly after, "All is peace!'

Rarely do we see a character more respected by the world, or more truly lovely, than of the young man whose body we have now laid in the grave.

From the Cultivator.

OBITUARY OF PROF. NORTON.

Misfortunes never come singly. We had scarcely laid down our saddened pen, and cast an earnest look into the already darkened future, when another in the bloom of his maturity, was called hence. Calmly, peacefully, trustingly, he has passed to the land of his faith, to the home of the blest, leaving regret to border the pathway he had trod, and tears to water in vain the hopes which his usefulness had awakened. Prof. Norton is dead, aged only thirty.

> "Those the gods love, die young,
> But they whose hearts are dry
> As summers' dust, burn to the socket."

The lives of the truly great are always instructive, and could we read them rightly, would teach us useful lessons, both in the sublime results which attend their labors and in the mode by which their greatness has been attained. While one whose talents and accomplishments have distinguished him among the wise men and scholars of his day lives, we admire only the proofs of his ge-

nius and ability; but when such an one is removed from our midst, we naturally inquire into the elements of his power. It is in this way that, when one is dead, he yet speaketh—speaks not only in word and in deed, but in the more silent operations of the mind, which are marked in the successive grades of culture by which one rises to eminence.

Deeply as we deplore the loss of the most practical agricultural writer and thinker of the present time—one from whence the farming community expected much, and whose efforts promised more permanently beneficial results than those of any other man, we shall find that his life, though short, is full of instruction and replete with interest.

From his youth, Mr. Norton had been more or less conversant with the practice of agriculture, and as is naturally the case with an inquiring mind, the apparent lack of system, and ruinous waste often seen, led to thought and investigation. After having pursued the study of chemistry with the ablest professors in this country, he visited Europe, in the summer of 1844, for the purpose of pursuing his studies farther than could be done here, and also to extend his observations. Mr. Norton accompanied Prof. Johnston on a tour through Scotland, the results of which appeared in his letters published in this journal. These letters, which were continued regularly

during his absence, were his first introduction to the public as a writer, and established his reputation as a careful observer, a close reasoner, and a sound thinker. During his stay in Scotland he enjoyed the closest intimacy with Prof. Johnston, and pursued his studies under his direction at the Laboratory of the Agricultural Chemical Association. The analyses furnished by him from time to time, show the accuracy of his mind and his superior industry, and his Notes on Prof. Johnston's Lectures are valuable abstracts, forming almost a complete text book of agricultural science. All his communications to the Cultivator are of permanent value, and show the condition of agricultural science in Scotland at that time.

In the fall of 1845, he made a tour on the continent, for the purpose of visiting some of the most celebrated laboratories, and his letters were for a time discontinued. Shortly after, he returned to this country, when he received an appointment to a professorship of chemistry, as applied to agriculture, which had been created at Yale College. Mr. Norton wished to perfect himself in chemistry before entering upon his duties as professor, and with this in view he sailed again for Europe in the fall of 1846. Here we notice a prominent characteristic of Prof. Norton. There was nothing of pretension in his nature—he was unwilling to assume a responsibility till he felt himself fully equal to it. Instead of being vain

of the honor thus early bestowed on him, he goes manfully and earnestly to work to lay, deep and strong, the foundations of a science, of which the first rudiments were scarcely known.

In the year 1846, a premium of fifty sovereigns ($250) was offered by the Highland and Agricultural Society of Scotland, for the best analysis of the oat. The chemical constituents and the physiology of the growth of this plant, were little known, and a scientific analysis had never been attempted. Mr. Norton, still a student in the laboratory, and in competition with several learned chemists, obtained this premium. This is more remarkable from the fact that he was an American, and unknown to the scientific world. The article contains thirty-nine tables, showing the composition of the different parts of the oat, and at several stages of its growth, and displays a vast amount of research and an untiring industry. In the conclusion of the article, Mr. Norton remarks—"I may be permitted to say, that the extent of this investigation, and the many points which I have been compelled to leave undetermined or doubtful, after eighteen months of constant labor, must convince those who entertain false ideas of the time and patience necessary for chemical researches of this kind, that they have erred in supposing the chemist able to do in a few days or weeks what can only be effected by the labor and study of many successive years."

How strangely does this language of a successful scholar contrast with the assertions of later, not to say riper chemists, who arrive at the most profound conclusions with an astonishing facility, and, in advance of public opinion, award to themselves the highest eulogiums.

During his stay in Europe Mr. Norton studied with Prof. Mulder at Utrecht, Holland, one of the greatest physiologists and chemists of his day. His letters from Holland are admirable pictures of the rural aspect of the country. Upon his return to this country in the fall of 1847, he entered upon his duties at Yale. Though attendance on the lectures in his department was voluntary, and comparatively little attention had been paid to agricultural chemistry by the young men in our colleges, he soon gathered a class of students, which was gradually increasing to the time of his death. His laboratory was in fact the only place in this country where the principles of science, as applied to agriculture, were thoroughly taught.

The cares of his professorship were not his exclusive occupation. A Treatise on Scientific Agriculture, which was written as a prize essay, and took a premium of one hundred dollars, offered by the New York State Agricultural Society, and was subsequently published as a text book for schools, was prepared by him in 1850. This little work embodies all the fundamental principles of agricultural science, so far as well established, and has been widely circulated.

Prof. Norton also wrote an appendix to Stephens's Book of the Farm, together with notes, such as to adapt it to this country. In the Cultivator for January, 1850, Professor Norton commenced a series of letters, which were continued without interruption till his sickness. Those communications were of such a practical nature, and so well adapted to the wants of farmers, that they constituted one of the chief attractions of the Cultivator. His views of scientific farming were not of that ultra, radical sort that empyrics love so well to dwell upon, but rather the more rational and common sense ideas, which a knowledge of the real condition of our farmers and their interests, combined with sound discipline of mind, would naturally form. If his style lacked ornament, it was because the frame work he had to build was too vast a structure to admit of decoration; if he rarely called imagination to his aid, it was because he was too intent upon the stern realities of things; if he seldom manifested any great enthusiasm, it was because he was conscious of having only entered on a work whose triumphs still lay in the unexplored future. Thoughtfully, carefully, steadily, he was laying the foundation on which, in after years, he might rear as proud a monument as science ever wrote her name upon. Agriculture in this country had much to hope for in his efforts: for he bent the undivided energies of his mind to its

advancement. His whole soul was in the work; he had the confidence of every one, and with no other person could the interests of our rural population be so safely entrusted as with Professor Norton. Upon whom will his mantle fall? Who will arise to guide through the shoals and quick sands of reckless imposture, the noble ship of American industry?

We have not space enough to speak of particular articles of Prof. Norton's, nor to notice the many addresses which he delivered at intervals before agricultural societies and the community generally. Suffice it to say, that every thing he wrote, and every thing he said, was marked by the same uniform prudence, the same careful judgment, which characterizes the man. He was never led into error — never ran headlong into chimeras and fanaticism — and so was never obliged to retract what he had said, or retire from positions he had taken.

When the project of the University of Albany was broached in 1851, Professor Norton entered warmly into the plan. He had felt deeply the need of such an institution, and knew the obstacles which lay in the way of the students of agriculture and the natural sciences. He advocated it as the best means of securing a permanent basis to our agricultural interests, and forming a nucleus for science in this country. The lectures which

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he delivered in the winter of 1851-2, before a class which was gathered in Albany, were popular and instructive. He had a rare faculty of expressing in plain language his thoughts on the most abstruse subjects, and also of holding the attention of an audience to his theme. The severe labor, attendant on delivering courses of lectures at New Haven and at the University of Albany, materially impaired his health, and before the close of his lectures, he was obliged to leave for a warmer climate. Strong hopes were entertained, at first, of his recovery, but Providence had otherwise ordered. After his return to the north, he sank slowly to his end. Though conscious that he must leave a world which was just opening to his ambition, and a circle of friends who fully appreciated his worth, he was cheered on by that Christian hope which had been his guide and solace during life. The exchange of worlds is for him a happy one, but his loss will cast a shadow on many a heart.

His character was in the highest degree estimable, and his virtues were of that quiet, unobtrusive nature, which steal so readily into the affections of every one. He was eminently fitted to grace the social circle, and his pleasing, artless manner, winning address, and animated style of conversation, made his society peculiarly desirable.

The personal friends of Prof. Norton mourn one who was endeared to them by the closest intimacy,—the scientific world, one of their brightest lights, and the readers of the Cultivator, a most valuable correspondent. Thus in the space of five short weeks, have we been called to write the obituaries of the two most prominent horticultural and agricultural writers of the day, men whose places can not well be filled, and whose memories will long be cherished by every lover of his country.

From the Boston Cultivator.

JOHN PITKIN NORTON.

In common with all true friends of improvement, we mourn the death of this talented and estimable man. We express no feigned regret—we feel that the whole country has suffered loss. This is not the occasion for his eulogy, were we able to do justice to his character: but we can not refrain from some tribute, however feeble, to the memory of one, whose brief career has been so useful, and whose prospects, viewed in reference to the benefits he might have conferred on his fellow men, were so full of hope.

Professor Norton was no ordinary man; he was one in whom the "elements seemed so blended," that he commanded universal respect. Though he had only reached the age of thirty years, he had wrought for himself a position and reputation among the distinguished men of the age. His labors were principally directed to the applications of science to agriculture, and without any invidious motive, we may safely say that to no man is this country more deeply indebted than to him, for the valuable truths which have been

elicited on this subject. His whole aim was truth. He sought no temporary eclat by the announcement of novel ideas, or ill founded statements. With a strength of judgment and power of discrimination beyond his years, he carefully weighed and examined every thing, and held fast the good.

His advantages of education, which were liberal, were well improved. He spent nearly three years in Europe, under eminent professors in Britain and on the continent, returning to this country in 1847. To aptitude in acquiring knowledge, he united the happy faculty of practically applying it—a faculty which was doubtless greatly strengthened by his labors and observations on his father's farm.

For a few years Prof. Norton has been at the head of the department of Chemistry applied to Agriculture and the Phenomena of Vegetable and Animal Life in Yale College; in which capacity many young men have had the benefit of his instructions. He has also been a frequent contributor to the agricultural and scientific journals, and has lectured with great acceptance on agricultural subjects.

His death was caused by disease of the lungs, combined with the effect of measles. His health has been considerably impaired for some months, but hopes were entertained of his recovery until within a short time.

ON THE DEATH OF PROF. JOHN PITKIN NORTON.

Called early! Gone, while yet his years were few:
So counts the world upon her calendar;
But those there are who wear the snows of time
Upon their furrowed temples, and yet die
Younger than he, the great intent of life
All unachieved.
Yet hath he made his mark
On his own clime, and on the Mother Land
Beyond the flood, even in his youthful prime.
Yes, he hath made his mark.
Yale's classic halls,
In all their ancient pride, remember him;
While, neath their dome, a thoughtful student band
Who duly listened to his treasured lore,
Lament their Teacher.
Yes, it seems that earth
Herself remembereth him; so well he knew
Her hidden elements and sequences,
And how to wake her full benevolence,
Making her children happier through her wealth,
Methinks even trees and plants remember him,
And pour, on heavy winds, a solemn wail;
Their harp-like branches mingling with the sigh
Of sorrow from his desolated home.
Life spread in strong array her charms for him:
Young wife, and infant boy to lisp his name,
Father and mother, and the stricken hearts
Of truthful brothers, clinging round his own.

Saw ye beside his grave two honored forms,
Fond guardians of his parents' infancy,
Who now, in holy sanctity of age,
Wept for their loved one, as the flower of grass
Fading beside them?

The same hallowed guide*
Who blessed his hoary grandsire, when he took
His pilgrim staff, to tread the darkened vale,
Did gird him, as he suddenly went forth
On his returnless journey.

List his words!
When with a brandished dart the pale king rose,
Like basilisk amid a violet bank:
"*Peace and a steadfast hope.*"

Serene, he closed
His eyes in solemn thought, a little space,
Communing with his God.

And then there burst
From their unfolding lids, a light of joy,
And from his icy lips the blessed sound
Of "Glorious immortality."

And so
He passed away.

And those who saw that scene,
Though grief's dire pang was wrestling at their heart,
Touched by that strong sublimity of faith
That conquereth death, mingled God's praise with tears.

L. H. S.

* The Rev. Dr. Porter, of Farmington, who was greatly beloved and respected by the late venerable Gov. Treadwell, of Connecticut.

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